Week 2 Lab Exercise 1 - Install Docker and VSCode Docker Extension

Docker Desktop Installation (for Windows 10 Professional and Mac)

Docker Toolbox Installation (for Windows 10 Home and older versions of Windows)

VSCode Docker Extension

Run the following Docker command to ensure Docker has been installed:

docker --version

For the following exercises you'll be working through the lab found at: Docker Lab

Exercise 2 - Hello World

Since you have already installed Docker above you only need to do the following in the "Setup" step of the Docker lab:

Share your drive(s) (only if you are using Docker for Windows).

Run the hello-world.

You can read through the other documentation in the "Setup" step if you want.

Exercise 3 - Running a Container

Read and work through step 1.0 in the Docker lab.

Let me know if you have any questions (how to do something, what's happening, etc.) or run into problems.

Exercise 4 - Sample Web Application in a Container

Note: When the lab mentions "Docker Store" it is synonymous with what I refer to as "Docker Hub".

Do 2.1 of step 2.0 in the Docker lab.

Do 2.2 of step 2.0 in the Docker lab.

Exercise 5 - Your Web Application in a Container

Do 2.3 of step 2.0 in the Docker lab with the following exceptions.

1. Replace the steps in 2.3.1 with the following:

Copy the folders/files from your week1 folder to a week2 folder.

2. Replace the steps in 2.3.2 with the following:

Copy the nginx folder and the Dockerfile from the week2/app1 folder in my GitHub repo to your week2 folder.

Proceed with 2.3.3 through 2.3.4

There are two 2.3.4 sections. Use port 80 instead of port 5000 in the docker run command.

Email me a URL to your Docker Hub/Store registry account. I should be able to pull your image, run it and view your Web application.

You can do the Flask application example if you want for 20 points extra credit. I highly recommend trying it as it will give you more understanding of Dockerfiles.

Exercise 6 - If you want, explore the VSCode Docker extension to see what you can do with it.